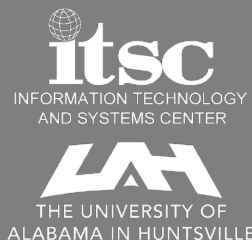




# GHRC Web Improvements

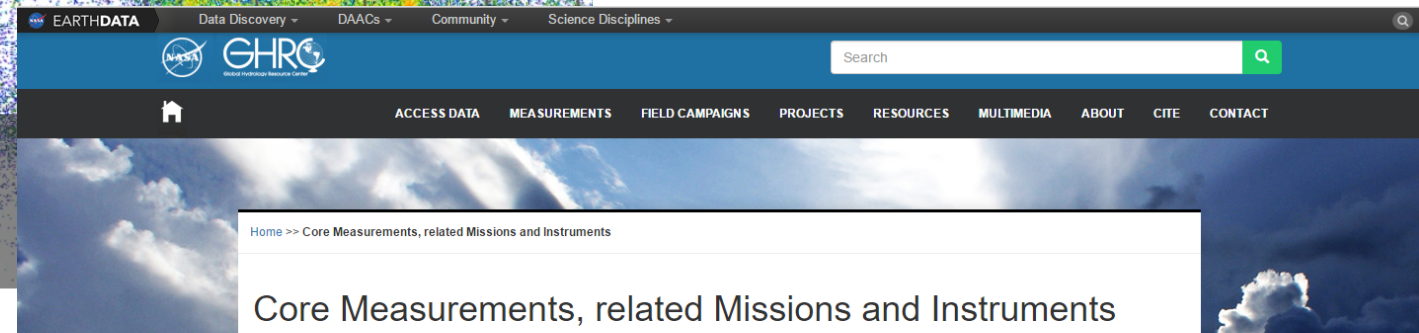
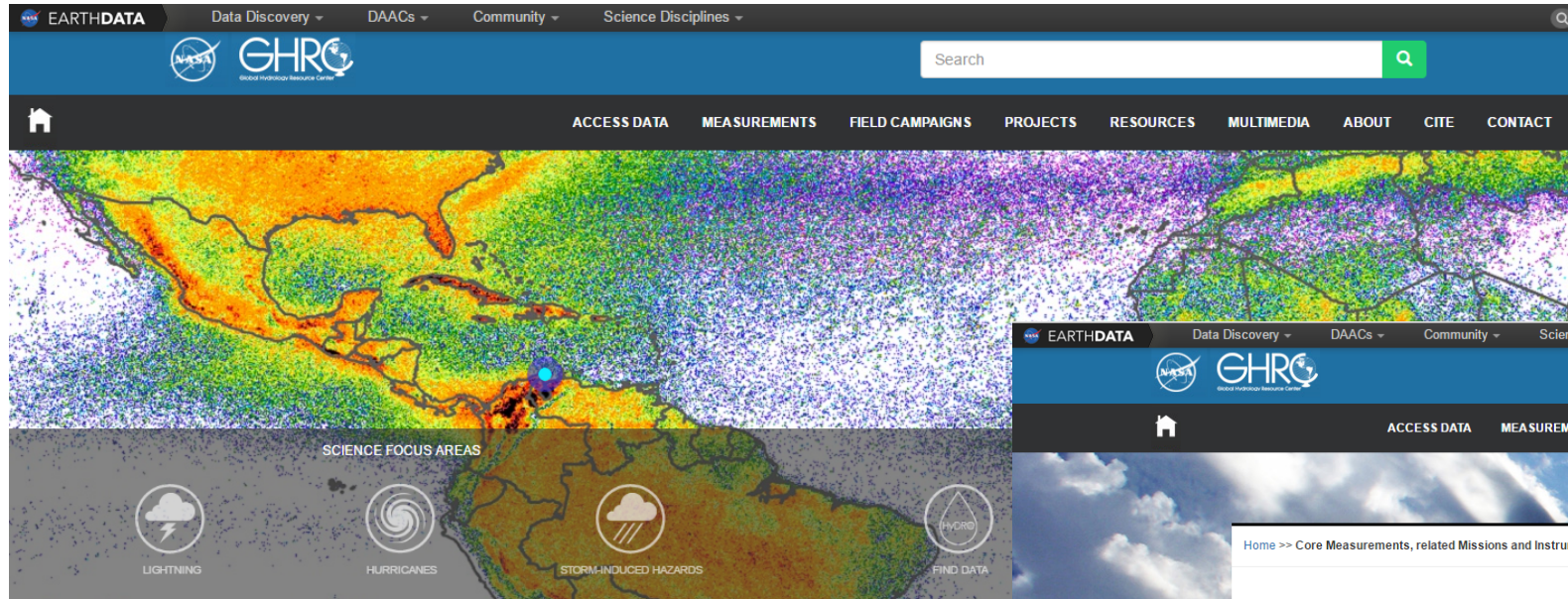
Deborah Smith  
GHRC Web Team

2016 GHRC User Working Group Meeting  
Sept 20-21, 2016



- Improve site design and mobile functioning
- Add new content
- Continue to improve existing site content and flow
- Continue migration to Drupal of static pages
- Improve our understanding of user metrics
- Increase visibility of GHRC

# New Web Page Redesign Released June 2016



feedback

## ABOUT GHRC

The mission of the GHRC DAAC is to provide a comprehensive active archive of both data and knowledge augmentation services with a focus on hazardous weather, its governing dynamical and physical processes, and associated

Has look and feel similar to ESDIS Earthdata site  
Improved performance for tablet and phone

Data Discovery
DAACs
Community
Science Disciplines

Search datasets, news, articles, and information

Home
ACCESS DATA
MEASUREMENTS
FIELD CAMPAIGNS
PROJECTS
RESOURCES
MULTIMEDIA
ABOUT
CITE US
CONTACT US

## Lake Effect Snow Event during GCPEX Field Campaign

EVENT TYPE

Lake Effect Snow

TIME RANGE:

February 10-12, 2012

SPATIAL COVERAGE:

[N: 47, W: -80.2, E: -67.7, S: 43.5] degrees

Science Description

Lake effect snow is generated when cold air moves over warm lake waters such that narrow bands of snow clouds develop. The warmer lake waters heat the lower portions of air causing it to become less dense and begin to rise. As this moisture-laden, warmer air rises it begins to cool leading to condensation and the formation of clouds that can become rather tall enabling the growth of very large snowflakes. Lake effect snow bands can produce snowfall rates exceeding 5 inches an hour, especially if the wind is directed along the largest width of the lake so that a great deal of moisture is continually supplied to the clouds.

Event:

**What happened and why it happened**

A lake effect snow event occurred during the GPM Cold-season Precipitation Experiment (GCPEX) field campaign in Ontario, Canada during the 2011-2012 winter season. Cold, northwest winds moved across the Georgian Bay in eastern Lake Huron and picked up moisture from the lake that fed the development of clouds and snow that varied considerably across a small region south of the bay. The snow clouds developed into persistent narrow bands that resulted in 2 inches of snowfall accumulation at one of the ground sites whereas only 12 miles away they produced 16 inches of snow.

Get Data

Lake effect snow is generated when cold air moves over warm lake waters such that narrow bands of snow clouds develop. The warmer lake waters heat the lower portions of air causing it to become less dense and begin to rise. As this moisture-laden, warmer air rises it begins to cool leading to condensation and the formation of clouds that can become rather tall enabling the growth of very large snowflakes. Lake effect snow bands can produce snowfall rates exceeding 5 inches an hour, especially if the wind is directed along the largest width of the lake so that a great deal of moisture is continually supplied to the clouds.

The dataset names will link to their respective DOIs

- Four varieties of Micro Article:
  - Phenomena
  - Event Descriptions
  - Instrument Descriptions
  - Publication Summaries



# Improved Documents Section Navigation

[View](#) [Edit](#) [Manage display](#) [Node export](#) [Log](#) [Devel](#)

Home >> Documents

All documents

**Data Documents**  
[User Guides](#)  
[PI Documentation](#)  
[Dataset Software](#)

**Micro Articles**  
[Instrument Descriptions](#)  
[Publication Summaries](#)  
[Events of Interest](#)  
[Phenomena](#)  
[Data Recipes](#)

**User Support**  
[Contact Support](#)  
[Submit Your Data](#)

**Data Management Process**  
[Data Lifecycle](#)  
[File Naming Convention](#)  
[Levels of Service](#)


**Papers with GHRC Data**

**GHRC Annual Reports**  
[2016 Report](#)  
[2015 Report](#)

**GHRC User Working Group**  
[UWG Charter](#)  
[2016 Agenda & Slides](#)  
[2015 Agenda & Slides](#)  
[2014 Agenda & Slides](#)


## Documents

GHRC documentation comes in a variety of forms. Please [contact us](#) if you are looking for something not shown here.




### Guide Documents

A "guide document" contains detailed information about the dataset, such as what instruments were used to gather the data and what the processing algorithms were.



### PI Documents

The PI documents are reports written by the Principle Investigator (PI) of the project. They provide detailed information about the project and datasets.



### Software

A list of programs developed at the Global Hydrology Resource Center.

- Documentation page menu update
- New pages on data product maturity and data submission added
- Order of data documents will be improved as soon as software update completed (by November)

# Add Data Product Maturity Information

## GHRC Data Product Maturity Table

Only primary GHRC data products are listed. Support data for campaigns or instrument datasets obtained from another data center have not been assessed.

GHRC DATA CATEGORIES	DATASET MATURITY
<b>SATELLITE MISSIONS</b>	
OTD swath data	Validated, L4
TRMM LIS swath data	Validated, L4
LIS/OTD climatologies	Validated, L4
LIS very high resolution climatologies	Validated, L4
AMS2 LANCE products	Provisional
AMSU/MSU temperature anomalies	Validated, L4
NOAA AMSU atmospheric temperatures	Validated, L4
OLS analog lightning	Validated, L1
OLS digital lightning	Validated, L1
<b>MEaSUREs DISCOVER PROJECT</b>	
SSM/I and SSMIS v7 ocean products	Validated, L3 for TPW, wind, sst L2 for Rain, L1 for cloud
Merged TPW	Validated, L3
Merged ocean winds	Validated, L3
RASI products	Validated, L1
TMI ocean products swath	Validated, L3 for TPW, wind, sst L2 for Rain, L1 for cloud
<b>FIELD CAMPAIGNS and EARTH VENTURES</b>	
HS3 AVAPS	Validated, L1
HS3 CPL	Validated, L1
HS3 HAMSR	Validated, L1
HS3 HIWRAP	Validated, L1
HS3 HIRAD	Validated, L1
ACES lightning field campaign	Validated, L3

- Web page contains Data Product Maturity levels for primary GHRC products
- Support data originating from another data center were excluded
- We will next integrate maturity information into landing pages

# Added New GHRC LinkedIn Group

in Search for people, jobs, companies, and more... Advanced

GHRC - the Hazard DAAC  
5 members [Manage](#)

Start a conversation with your group

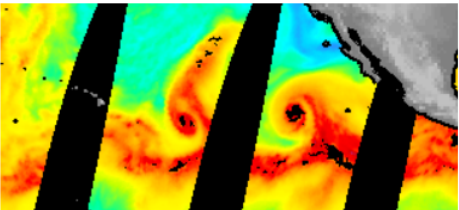
Enter a conversation title...

[Conversations](#) [Jobs](#)

**Deborah K. Smith**  
Research Scientist at Information Technology and Systems Center at T...  
OWNER

**Hawaii's hurricane punch**

Watch out Hawaii vacationers - here come the hurricanes! Madeleine and Lester approach bringing landslide-causing rain amounts for the big island. This image of SSMIS water vapor data on Aug 28th shows the two storms approaching the island chain (in gray in the left swath gap). Unprecedented? That's what the media says. What do you think?



[Like](#) [Comment](#) 2

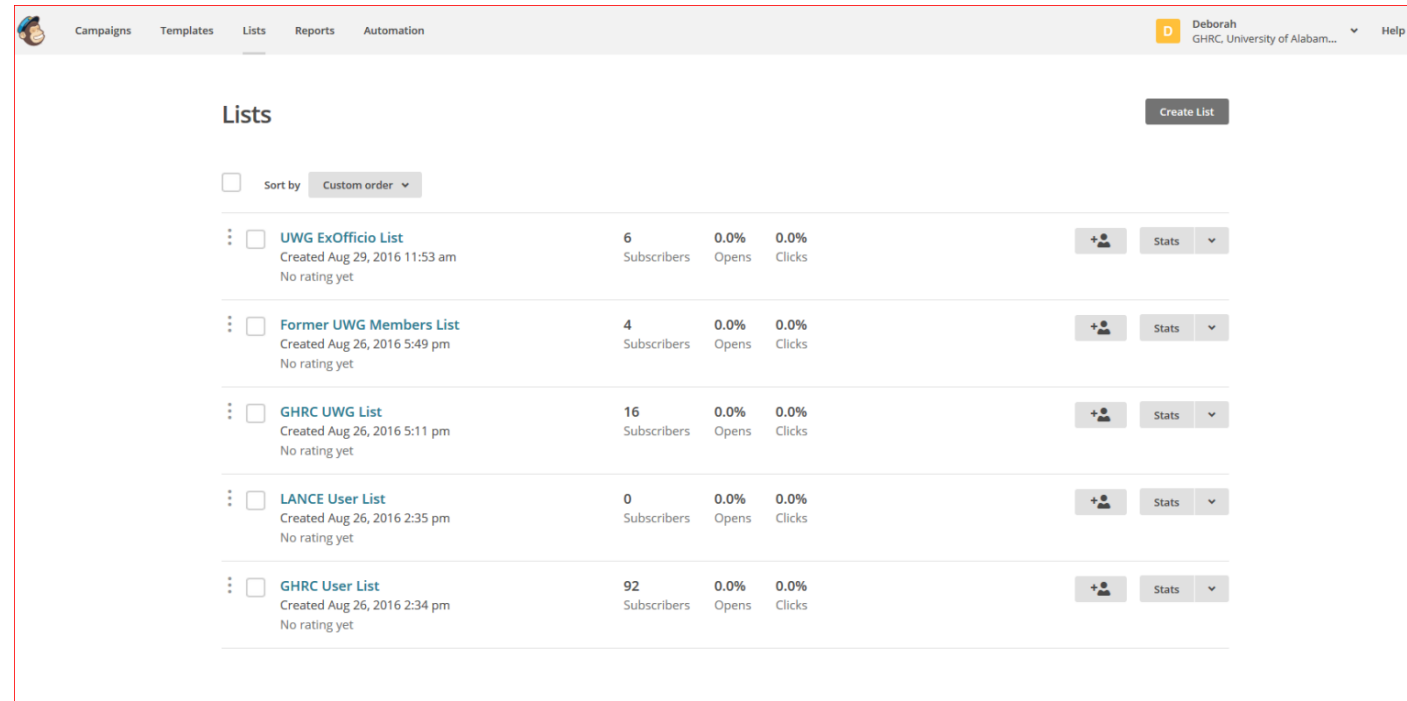
**ABOUT THIS GROUP**

The Global Hydrology Resource Center (GHRC) is a NASA Distributed Active Archive Center (DAAC), run by the University of Alabama in Huntsville. The GHRC archives data from satellite, airborne, or land-based instruments that are vital to the study o... [Show more](#)

**MEMBERS** 5 members

- Join the group!
- Invite your connections to join the group!
- Focus of GHRC group is on Atmospheric Hazards and the instruments that measure them
- We will continue to broadcast to increase group size and make routine posts

# MailChimp for User Email Campaigns



Lists					Create List
<input type="checkbox"/>	Sort by Custom order				
<input type="checkbox"/>	<b>UWG ExOfficio List</b> Created Aug 29, 2016 11:53 am No rating yet	6 Subscribers	0.0% Opens	0.0% Clicks	+ Stats
<input type="checkbox"/>	<b>Former UWG Members List</b> Created Aug 26, 2016 5:49 pm No rating yet	4 Subscribers	0.0% Opens	0.0% Clicks	+ Stats
<input type="checkbox"/>	<b>GHRC UWG List</b> Created Aug 26, 2016 5:11 pm No rating yet	16 Subscribers	0.0% Opens	0.0% Clicks	+ Stats
<input type="checkbox"/>	<b>LANCE User List</b> Created Aug 26, 2016 2:35 pm No rating yet	0 Subscribers	0.0% Opens	0.0% Clicks	+ Stats
<input type="checkbox"/>	<b>GHRC User List</b> Created Aug 26, 2016 2:34 pm No rating yet	92 Subscribers	0.0% Opens	0.0% Clicks	+ Stats

- Created Mailchimp account for contacting users
- Populated mailing lists with user emails of various categories
- Currently developing a template for mailings
- Next we will add mailchimp self-signup on web site pages with notification categories (lists) to choose from



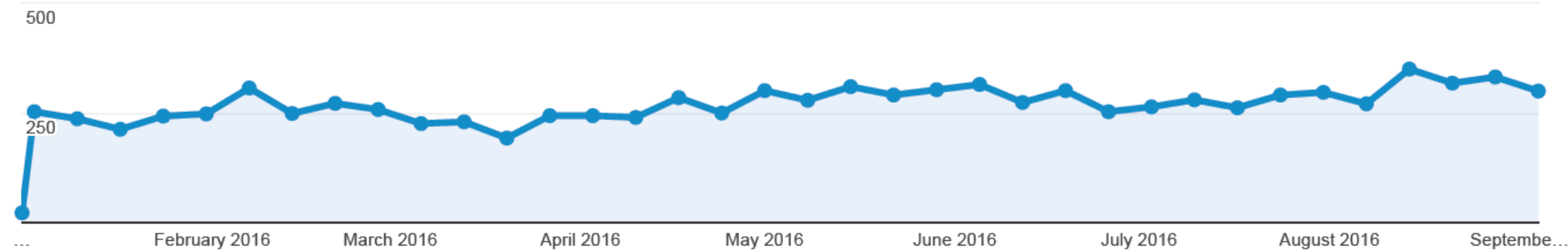
Added Google Analytics to GHRC web site so we can monitor usage and understand more about our users

From Google Analytics, we obtain information such as:

- Who our web site users are
- What percentage are new / returning visitors
- What countries outside US are visiting the web site
- What pages they visit
- What browsers are used
- Percentage desktop/mobile/tablet
- How long they stay on the web site and how many pages are visited
- Change in web site visits over time
- And more....

# Web Site User Metrics

● Sessions



Sessions

9,807



Users

4,887



Pageviews

26,718



Pages / Session

2.72



Avg. Session Duration

00:03:16



Bounce Rate

53.49%

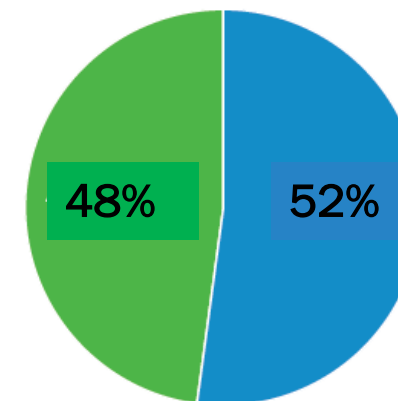


% New Sessions

47.83%



■ Returning Visitor ■ New Visitor

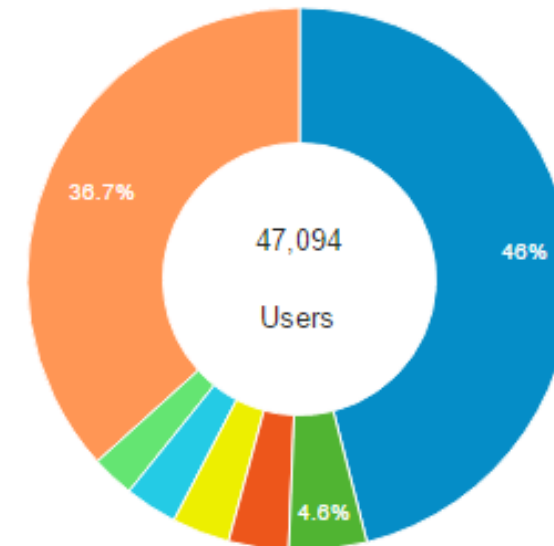


## Users and Sessions by Country

Country	Users	Sessions
 United States	21,669	35,699
 Russia	2,177	3,061
 India	1,678	2,365
 United Kingdom	1,613	2,754
 Canada	1,475	2,165
 Australia	1,199	2,711
 Germany	1,017	1,787
 China	1,015	1,734
 Italy	938	1,204
 France	871	1,537

## International Users

United States Russia India United Kingdom Canada Australia  
Other



- Kayako Earthdata ticket total since Aug 2013 = 197
- The questions are mostly about obtaining data for a particular date/time/location or asking a question about the data

**Answering questions through the Kayako system is just one (fairly new) way that we help our users. Many users know to contact Sherry directly by email or phone.**

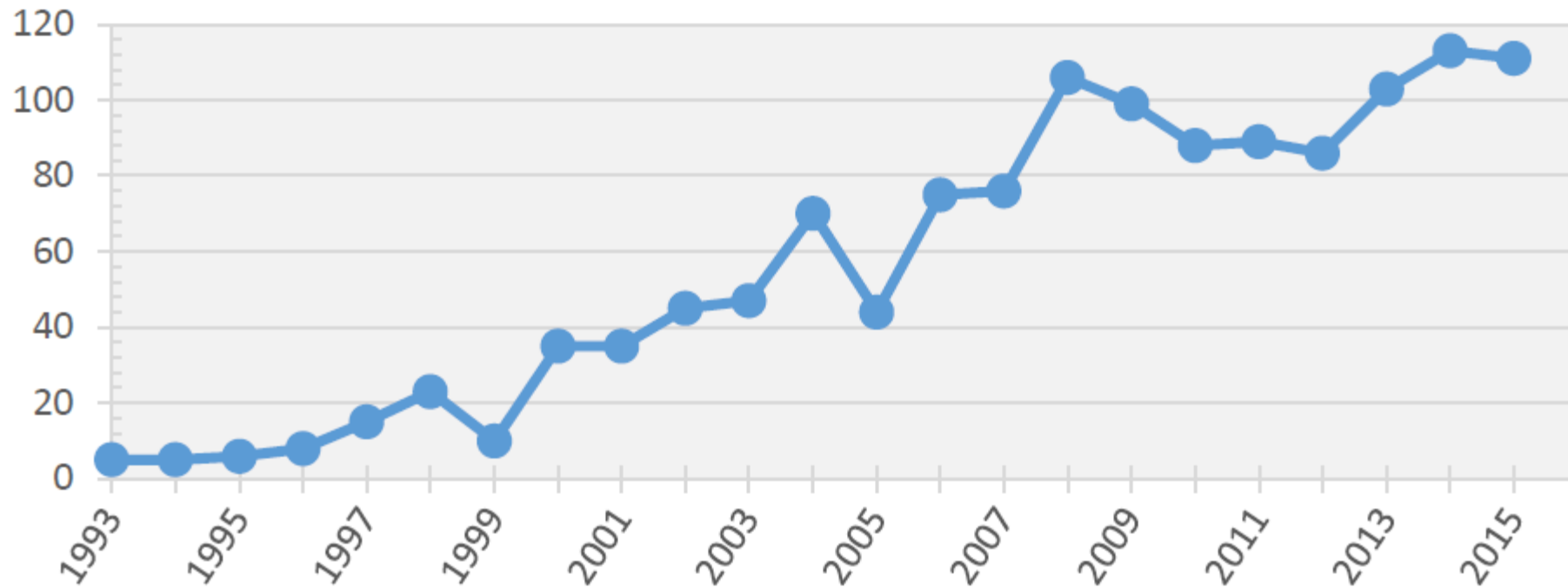
question about the data	34
data for a particular date/time/location	82
ftp problems	5
code request or problem	0
documentation request	2
missing data	1
validation/accuracy information	0
request for real time support	2
problem with the data	10
instrument information	2
kudos	0
notice of publication using data	3
contact information/acknowledgement information	8
file format GIS import	11
web page problem	9
request for data we don't have	7
other questions	21
<b>Total closed tickets since Aug 2013</b>	<b>197</b>

- Total confirmed publications using GHRC data in analysis as obtained from just Google Scholar during 2015 = 24, general automated network search without paper confirmation = 110
- Topics: (listed from most to least)
  - Lightning
  - Rain Validation
  - Microwave
  - Hurricane
  - Flood
  - Fire



# Increase in Publications using GHRC Data Continues

## Annual Count of Papers Citing GHRC Data



Number of publications per year continue to increase. Likely due to:

- Improved GHRC visibility
- Citation requirements by journal publishers
- Greater number of data products
- Ease in locating citations

# Goals for Coming Year

- Continue to develop new and further improve existing web site content
- Continue to improve web site function and navigation
- Further understand user web site activity and use findings to improve site
- Complete static web page migration
- Add user metrics to web pages
- Add Mailchimp notification self-signup to web page
- Post to LinkedIn group and increase participation



# Questions

- Are you finding what you need on the GHRC Web site?
- Do you have any concerns about the ease of navigation?
- What other information would be helpful to have on the site (e.g., data set recommendations, latest publications, etc.)?
- Which events or phenomena are most important to you?

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Sept 20-21, 2016

